

REMARKS

Claims 1-13 and 15-19 are pending in the Application and have been examined. Claim 14 has been canceled. Claims 20 and 21 are added hereby. Of the pending Claims, Claims 2, 4, 6, 8, 10, and 12 are indicated to be allowable as written, and Claims 7, 9, 11, 16, 17, and 19 have been indicated to be allowable, excepting that they depend from a previously rejected independent Claim. Claims 1, 3, 5, 13, 15, and 18 have been rejected.

Independent Claim 1 and independent Claim 13 have been rejected under 35 USC §103(a) as being unpatentable over Goldhaber, U.S. Patent No. 3,978,614 in view of Diemunsch, et al., U.S. Patent No. 5,098,790. In particular, Goldhaber discloses the use of a window casement covering that includes a plane of material and a stile. As recognized in the Official Action, Goldhaber does not teach a sandwich material that is formed from two or more planes of material. Diemunsch, et al. is cited as teaching a first plane of material, a second plane of material, and a core disposed there between, wherein the core material is polycarbonate.

The present invention solves the problem of protecting windows from missiles that are projected by hurricane force winds. The Claims require a window covering, such as a shutter, which is formed of a sandwich material. The sandwich material has a polycarbonate core. The inventor discovered that the window covering as claimed can withstand substantial forces, such as those generated by hurricane force winds, and more importantly, the resulting

sandwich material will pass missile tests that have been established by testing agencies to judge a material's ability to withstand and retard flying objects. See Page 2 of the Specification, at lines 24-29.

Diemunsch, et al. teaches a sandwich material that is stabilized against ultraviolet radiation (UV). There is no teaching or suggestion in Diemunsch, et al. to form a window covering or shutter from this material nor does it teach that the resulting sandwich material is of benefit in shielding objects against wind driven missiles or projectiles. Diemunsch, et al. do not suggest or point to the panel as a window covering, shutter, or similar device. Diemunsch, et al. appears to be legally insufficient, since the patent does not teach the best mode of using the panel of the invention.
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Accordingly, it would not be obvious to one skilled in the art to solve the problem of the present invention from the teachings of the Diemunsch, et al. patent, which is concerned with stabilizing the plastic against ultraviolet radiation, and makes no mention of providing protection from wind driven missiles. One skilled in the art would not find any suggestion or motivation in Diemunsch, et al., or in the combination of Goldhaber and Diemunsch, et al., to apply the stile of Goldhaber to the multi-layer panel of Diemunsch, et al. to create a window covering.

While Claims 1 and 13 are allowable over the cited combination, these Claims have been amended to indicate that the stile holds the sandwich material formed from the first plane of material, the second plane of material, and the core, in position. Diemunsch, et al. does not teach a stile or any similar device to

hold the sandwich material together, rather, as the Official Action points out, relying on co-extruding the three layers of materials. Neither does Goldhaber teach holding multiple layers of materials together by means of a stile.

Claims 1 and 13 are allowable over the prior art of record.

Claim 5 depends from Claim 1, and was rejected under 35 USC § 103(a) citing Goldhaber in view of Diemunsch, et al. In particular, it is the position of the Official Action that "the first plane of material, second plane of material, and the core are resins extruded together, thus the materials are inherently attached adhesively by the mere fact that they are resins extruded together." Claim 5 has been amended to indicate that the adhesive material is applied to the core. Claim 5 indicates that the adhesive is a separate material that is applied to the core, and that the adhesive is not a byproduct of a co-extrusion process. Claim 5 also indicates that the adhesive material and the stile hold the sandwich material in position. This feature is not found in cited prior art.

Claim 6 depends from Claim 2, and has been amended to correspond to Claim 5, as amended.

Claim 18 requires that the first plane of material is present on an exterior of the window covering. This limitation is indicative of the arrangement of the planes of material so as to stop wind driven missiles. Claim 18 stands rejected under 35 USC § 103(a), citing Goldhaber in view of Diemunsch, et al. Specifically, the Official Action states that "the first plane of material is inherently and [sic] exterior window covering."

It is respectfully submitted that Diemunsch, et al. do not teach a window covering, therefore, Diemunsch, et al. do not teach which plane of material is on the exterior of the window covering. However, Claim 18 has been amended to further indicate that the first plane of material is present on an exterior of the window covering, wherein the core is behind the first plane of material and in front of the second plane of material. Since Diemunsch, et al. do not teach a window covering, they do not teach the orientation of the various planes of materials relative to the window.

Claims 20 and 21 are newly added, and correspond to each other. These Claims require the first plane of material to have at least one void therein, wherein a portion of the core is exposed through said void. Support for these Claims is found in drawing Figure 2, wherein the core is exposed through voids in the first plane of material.

It is respectfully submitted that Claims 1-13, and 15-21, are in condition for allowance. Review and allowance at the earliest possible date is requested.

Respectfully submitted,



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CERTIFICATE OF MAILING

I hereby certify that this Response to the Official Action dated May 15, 2003, and Post Card are being deposited with the United States Postal Service, with sufficient postage attached thereto, in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 15th day of August, 2003.

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